

**Commission on the Environment's
Green Building Policy and Program Recommendations
As submitted to City Staff
September 9, 2008**

We, the City of Rockville's Commission on the Environment, have spent considerable time examining, researching and discussing approaches to a "Green Buildings" Policy for Rockville. We have looked at all segments of building ownership and classes of users. We have conducted our own research on case studies around the country. We have spoken with national experts, with City staff, stakeholders and attended local and National conferences on these topics. We have also examined databases on the current building inventory of Rockville based on tax records. All of this activity, combined with the expertise of our Commissioners and working group volunteers, has resulted in the formulation of the following twelve recommendations.

In some instances, the recommendations include annotations to explain more fully the intent of the Commission in those areas. Also included is an appendix that describes the guiding principles used in the formulation of these policy recommendations.

To most effectively meet the goals set out in the Sustainable Rockville Strategy, the City of Rockville should:

- 1. *Prioritize various building sectors into at least two phases — identify those sectors able to act immediately (early adopters) and implement enforceable actions for Phase 1. Identify more mainstream segments where market conditioning is required before enforcement actions are taken and apply voluntary and/or education and outreach initiatives to Phase 2.***

Annotated Note

Phase 1 should represent sector segments targeted for immediate actions that could lead to systemic change (i.e., change business practice) toward high performance buildings. Based on how these segments are defined they should impact entities controlling large square footage in the city or are in a unique position to act as early adopters of clean energy/environmental technologies.

Phase 2 should represent segments that will require market conditioning before enforceable actions are taken. These segments tend to be lower square footage, diverse and diffuse. Multiple solution sets will be required and for that reason, we recommend smaller piloted or voluntary efforts to determine cost-effective approaches and allow for further planning on the part of the City for eventual scale-up (i.e., likely to require some financial assistance and staffing requirements) to enforceable actions.

- 2. *Without requiring certification, use the LEED rating system to define acceptable levels of environmental performance for new and existing commercial, industrial and municipal buildings – but also allow for equivalent proof of performance through building models and/or simulations of performance (e.g., DOE² models) as an alternative method. Define the appropriate LEED equivalence parameters carefully.***

Annotated Note

The Environment Commission, in its research of Rockville's built environment (in comparison with other jurisdictions), recommends for consideration a minimum threshold of 7,000 square feet or above as a means of capturing a significant level of improved environmental performance. The number of buildings at higher square footage levels would impact less than 100 facilities. If business practice is going to move toward green applications in Rockville then the impact must go beyond tens of buildings and hit a critical mass for real market momentum toward change. In keeping with this recommendation, City staff should determine an appropriate LEED-based goal for buildings in this category.

However, the Environment Commission is concerned that the LEED rating system has been found to demonstrate an inherent technology bias based on its assignment of points, and so believes strongly that an alternative procedure – based on building simulation or modeling (which has a similar upfront cost as LEED assessment) – should be allowed as well for qualifying under Rockville's Green Buildings program. Accepting this alternate "proof of performance" will allow the full range of technology options to be deployed in Rockville's built environment.

3. ***Create a "Green Fund" and determine an appropriate sliding scale for contribution to the Green Fund based on development size (see Recommendation 4) – The Green Fund will be used to fund incentive programs, such as home energy audits; low/no cost upgrades for fixed/low income; contractor, inspector and building manager training; alternative energy projects etc. and when possible leveraged against other City funding streams.***

Annotated Note

The Environment Commission believes that a significant portion of the *Green Fund* should be set aside for properties that pass "needs" criteria (e.g., low fixed or moderate income falling just over the Federal guidelines for assistance). These households are some of the most strongly impacted by rising energy costs or health problems resulting from poor indoor air quality and have few channels to receive assistance, yet could benefit greatly from a low cost environmental upgrade. As demonstrated in other jurisdictions, these "low-cost/no-cost measures" packages, if administered by the City (possibly in conjunction with Community Action Agencies), can be as low as \$800 per unit and yield a 20+ percent reduction in utility bills as well as improve the condition of the unit. Given that these properties would likely continue to deteriorate in environmental performance without intervention, the City should find a means to affect change in this segment. At the time of installation, occupant education could also be offered to ensure continued improved performance.

The remaining portion of the funds should be allocated to education and training as well as financial incentives for innovative green building and alternative energy projects. The programs described throughout this document require awareness and education to be effective. Real estate agents, inspectors, and even installers may need to be trained and the City might reach out to existing organizations such as the Green Buildings Institute of Maryland, Montgomery Community College, and Community Action Agencies with existing curriculum that could be adapted for the Rockville Green Buildings program.

4. ***Create a "Green Bond" for new developments over a certain size and a "Green Fee" for renovations impacting (either on existing square footage or by expansion of the***

existing footprint) more than 50 percent of the structure— Determine the appropriate bond and fee size, and hold these monies until the completion of the project. Up to 95% of the bond may get returned on a sliding scale based upon the development’s environmental merits; any remainder is deposited into the Green Fund.

Annotated Note

Those commercial and industrial entities subject to Recommendation 2 would also be subject to the terms of Recommendation 4.

We strongly believe that some form of financial fee should be placed on the renovation market especially where substantial “gut” renovations occur. These renovations create opportunities for improving embedded environmental performance – that is to say that Rockville’s energy and carbon footprint is determined substantially from its existing building inventory, and our greatest gains can only be achieved by finding ways to impact those existing buildings. Considering that renovations of existing buildings will likely continue to outpace the number of new commercial or industrial building projects (over the 7,000 square foot threshold) in the City, the ability to affect renovated space under this policy will be critical to impacting the City’s overall carbon foot print.

Also, we believe that use of a graduated fee approach would not put an undue burden on the lower end of the suggested range of renovation projects.

- 5. *Perform a short-term audit of the City’s current permitting and inspection process to define areas where expedited “green tracking” could save developers time and money — Diagram the process for various types of new development/redevelopment, and include the expected and actual timeframes of each step of the current process.***

Annotated Note

The Environment Commission also suggests for consideration the examination of other features of the permit process that could be streamlined or improved—particularly with regard to organizational nimbleness and communications, even including such policy actions as the introduction of staff incentive programs for improved performance.

- 6. *Create a “Green Tracking” procedure to expedite the development review, permitting and inspection process for the “best performing buildings” — Determine the appropriate LEED or equivalent level to qualify for this expedited program, and assign a City staff facilitator to shepherd each qualifying project through the process.***

Annotated Note

Entities subject to Recommendations 2 and 4 would form the potential pool of candidates for selection of “Green Tracking”; however, this service offering would be provided as an additional incentive to those organizations willing to reach the City’s “stretch goals” on environmental performance.

To ensure that real time gains are reached in the permit processing, the Environment Commission strongly recommends that a City staff facilitator be assigned as point of contact for each qualifying entity/project and assist in shepherding these “Best in Breed” projects through the permitting process.

- 7. Develop “green tracking performance indicators” — to ensure high performing projects are truly expedited; regular reports would be provided to the City Manager’s Office and Mayor & Council on the speed and efficacy of the program.**

Annotated Note

The Commission suggests that projects qualifying for “Green Tracking” form a pipeline of reporting (similar to Executive-level dashboard reporting) up to the City Manager’s level, where at regular intervals progress status receives an executive review. Similarly, a status update should be given to all relevant Boards and Commission as well as Mayor and Council. This pipeline reporting should form the basis for a series of metrics linked to the Sustainable Rockville Strategy and incorporated into a publicly available document.

Over time, the Environment Commission believes that this level of scrutiny as well as the opening up of crosscutting communications channels will improve the entire permit process such that all businesses and citizens of Rockville will benefit.

- 8. Involve the Environment Commission in the review stage — of several of these recommendations, such as reviewing completed projects for determination of Green Bond release, and reviewing high performance project concepts for inclusion into the Green Tracking expedited development process.**
- 9. Develop a voluntary “Rockville Green Residence (RGR)” program with checklists for homeowners to follow to certify their home — Checklists may include common Energy Star appliances, home insulation levels, landscaping and storm water practices, etc.**

Annotated Note

The Environment Commission recommends the following features for consideration:

- A voluntary pilot residential program focused on affecting change at the time of sale of a house—where the house would be brought up to a certain standard.
- Develop a prescriptive list of recommended changes—required and optional—including energy-consuming areas such as refrigerators, water heaters, windows, and washers/dryers.
- Brand the program—for use in window decals, forms and/or other marketing—such as the Rockville Green Residence (RGR) Program where checklists for inspectors and/or appraisers use it to determine if the home meets the criteria for the program.
- The RGR designation can be advertised by realtors (so allow for brand use by third-parties with proper oversight), demonstrating that this particular home likely provides better performance than a comparable model without these features.
- There could be a mandatory component to the program initially—homes over a certain square footage (e.g. 3500 ft²) must have Energy Star appliances—subject to city inspection; this area should include HVAC.
- The residential program should apply to existing and new homes.

The Environment Commission believes that in this difficult real estate market, this differentiation could give the program traction. Also, the program should be indifferent as to whether the buyer or seller makes the investment in the property. Down the road, as the City scaled up the program, it could provide other benefits to owners of RGRs such as lower fees (during a specified period) for recycling or other incentives for program participation.

- 10. *Develop a voluntary “Rockville Green Business (RGB)” program with checklists for sustainable business practices* — The City could list participating businesses on website, and perhaps promote them all during a “Green Business Day” events.**

Annotated Note

The Environment Commission recommends the following features for consideration:

- A voluntary pilot business program focused on providing improved environmental performance for renovations that impact less than 50 percent of the space.
- Brand the program, e.g., Rockville Green Business (RGB)
- Develop a checklist based approach —probably specific to space type.
- Develop a prescriptive list of recommended changes —required and optional—including energy-consuming areas and practices
- The checklist changes could be verified by the equipment vendor who sold the business owner the equipment and subject to possible verification by the City
- City may want to ask for utility bills to prove that energy use was reduced by a certain amount (BTUs basis that is lower by 15 to 20%).
- Depending on the space type, the city could also ask for certain practices to be implemented to ensure that a business is also recycling properly or disposing waste water properly, etc.
- A PR program could be launched to promote these businesses through POP advertising and special events such as “Green Days” where participating businesses get increased visibility by the City
- As scale-up occurs, certain fees could be discounted (or fee holiday) certain times of the year for the participating businesses

- 11. *Develop an education and outreach program for all sectors of the City* — to announce the rollout of the program and then determine where additional, more targeted needs must be met — i.e., tenant awareness programs, nonprofits, etc.**

- 12. *Harmonize all parts of the City Building Code and other relevant code sections to meet the requirements of this program***

Summation

This is the culmination of a series of brainstorming sessions held within the Commission last Fall and this Summer as well as a series of stakeholder meetings held in April. It stands as a distillation of ideas to form strategic recommendations for the City staff in their development of a Green Buildings Policy and Ordinance.

Ultimately, the Commission believes that the policy recommendations on “Green Buildings” should be right-sized for each sector of the City with the view that this is an evolving policy where the lessons of early adopters can formulate better policy recommendations later for more mainstream market actors. These and other factors have underscored to the Environment Commission that not all segments require the same level of action at this time and that a balance should be struck between mandated and voluntary actions.

We look forward to continuing to work with the Mayor and Council and City staff on this emerging policy front.

Appendix: Guiding Principles and Assumptions

- a. ***Understanding that buildings operate and function for different purposes and with different occupants***-- it is important to realize that building energy use patterns are complicated by the overlay of ownership structures which determines how utilities are paid. Is the owner responsible for the utility bill or the tenant? If the tenant pays, then what ability does the tenant have to affect that bill through equipment/appliance changes or other performance related technologies? Often when the occupant is detached from the bill, their behavior can adversely affect consumption. Therefore, it is important for owners to relate rent increases to rising energy costs. Consequently, the Environment Commission believes that no one policy attribute can serve the ultimate interests of all citizens in the City of Rockville. In the eyes of the Commission, there can be NO "one size fits all" policy for the different occupants, owners, and operators of buildings.
- b. ***Realizing that the characteristics of each interest differs with regard to technical knowledge, financial resources, access and adaptability to technological change*** -- the City should segment and prioritize interests to maximize the efforts of potential early adopters and to raise the awareness levels and facilitate solutions for those facing impediments to change.
- c. ***Acknowledging that technological change involves many factors allowing some interests to proceed sooner than others and accepting that the near to mid-term prevailing economic and market conditions are putting severe constraints on the investment in the built environment***-- the Environment Commission believes that the policy recommendations should initially reflect these sensitivities and prepare some interests for change down the road. In other words, not all segments should be acted on immediately, but may require voluntary actions that in later updates to the policy or ordinance can become required actions.